UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,450	01/17/2002	Daniel M. Gruen	600177.061	6982

61834   7590   12/11/2007

DREIER LLP
499 PARK AVE
NEW YORK, NY 10022

EXAMINER
KENNEDY, ADRIAN L

ART UNIT	PAPER NUMBER
2121	

MAIL DATE	DELIVERY MODE
12/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 September 2007</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>17 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Examiner's Detailed Office Action

1.   This Office Action is responsive to **Request Continued Examination**, filed **September**

21, 2007.

2.   **Claims 1-19** will be examined.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

4. Claims 1-6, 10-16, and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one skilled in

the relevant art that the inventor(s), at the time the application was filed, had possession of

the claimed invention. The examiner has found no support for that applicant's claimed

"preexisting collection" as found in claims 1-6, 10-16, and 19.

5. Claims 1, 10, and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention. The examiner has found no support for that applicant's claimed

"anomalous data item that is misclassified" as found in claims 1, 10, and 19.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al.

(USPN 6,094,651, referred to as Agrawal) in view of Yost et al. (USPN 6,567,796, referred

to as Yost).

Regarding claims 1 and 19:

Agrawal teaches,

applying at least one first rule to add the incoming data item and adding the incoming

data item to a preexisting collection (Agrawal; C 1, L 38-45; Examiner's Note (EN):

Having not further defined the claimed "preexisting collection" in the claimed invention,

the examiner has found that the applicant's claimed "preexisting collection" reads on the

database as taught by Agrawal.) of one or more data items if the incoming data item

follows the first rule (Agrawal; C 1, L 38-45; EN: The examiner takes the position that

based on the incoming data from the collection one or more rules are used to determine

which data to add to the multidimensional database, and how to arrange said data in the

database.);

calculating statistics regarding the data items in the preexisting collection (Agrawal; C 3, L 1-6; EN: Having not further defined the claimed "statistics" in the claimed invention, the examiner has found that the applicant's claimed "statistics" read on the residual difference and surprise value taught as by Agrawal.);

applying one or more second rules to the calculated statistics to identify whether the incoming data item is an anomalous data item that is misclassified (EN: The examiner takes the position that it would have been obvious to one of ordinary skill in the art that an anomalous data item is inherently misclassified.) and has not properly been added to the preexisting collection despite satisfying the at least one first rule (Agrawal; C 2, L 38-43; EN: Having not further defined the claimed "anomalous data item" in the claimed invention, the examiner has found that the applicant's claimed "anomalous data item" read on the data anomalies as taught by Agrawal.);

flagging the incoming data item as an anomalous data item if the data item is identified as an anomalous data item (Agrawal; C 4, L 47-52; EN: Having not further defined the claimed "flagging [of] incoming data" in the claimed invention, the examiner has found that the applicant's claimed "flagging [of] incoming data" reads on the highlighting of exceptions as taught by Agrawal.); and

indicating to at least one user that the preexisting collection contains at least one data item that has been identified as anomalous with regard to other data items in the preexisting collection (Agrawal; C 4, L 58-62; EN: Having not further defined the claimed "indicating to at least one user" in the claimed invention, the examiner has found

that the applicant's claimed "indicating to at least one user" reads on the identifying of

anomalous data using a user interface as taught by Agrawal.).

Agrawal does not teach the retrieving of a user preference profile or the indicating to a

user based on a retrieved user preference profile.

However, Yost does teach,

The retrieving of a user preference profile and the indicating to a user based on a

retrieved user preference profile (Yost; C 8, L 24-28; EN: The examiner takes the

position that by teaching the delivery of data based on the user's criteria, Yost et al.

anticipates the retrieving of said user profile. This position is supported by the fact that

in order to properly deliver the correct data to the user, the invention of Yost et al. must

retrieve the personalization module at some point).

It would have been obvious to one of ordinary skill in the art at the time of invention to

combine the anomaly search method of Agrawal with the subscription based broadcast

system of Yost for the purpose of facilitating the real time processing of data based on a

user profile (Yost; C 8, L 20-33).

Regarding claim 2:

Agrawal teaches,

(Currently Amended) The method wherein calculating comprises calculating a mean data

item size and standard deviation for the other data items in the preexisting collection

(Agrawal; C 3, L 16-20; EN: The examiner takes the position that in teaching the

recursively subtracting of the value of different data items from an average data item

value the applicant's claimed calculating of a mean data item size and standard deviation

is anticipated).

Regarding claims 3 and 4:

The examiner takes the position that in regards to claims 3 and 4 Agrawal anticipates the

calculating of a mean interval (claim 3) and an arrival time (claim 4) of data items and a

calculation of a mean and a standard deviation between these values, in Column 9, Lines

63-67, where Agrawal teaches that the data includes a time dimension. Furthermore, the

examiner previously established that Agrawal taught the calculation of standard deviation

based on the values of the data items.

Regarding claim 5:

Agrawal teaches,

calculating a presence or absence of keywords for the other data items in the preexisting

collection; and identifying whether the data item is an anomalous data item based on the

presence or absence of keywords (Agrawal; C 2, L 43-53; EN: The examiner takes the

position that the calculating of the presence or absence of keywords and identifying

whether an anomalous data item is present based on said keywords is anticipated by

Agrawal teaching the use of keyword such as "Self-Exp", "In-Exp", and "Path-Exp"

which are keywords that have an associated calculated value).

Regarding claim 6:

Agrawal teaches,

(Currently Amended) The method wherein calculating statistics for the other data items in the collection is performed in real time (Agrawal; C 1, L 22-25; EN: The examiner takes the position that is it widely known in the art that OLAP methods operate in real-time.).

Regarding claim 7:

Agrawal teaches,

(Original) The method wherein the step of calculating statistics for the other data items is performed periodically (Agrawal; C 24-28).

Regarding claim 8:

Agrawal teaches,

(Previously Presented) The method wherein identifying comprises determining whether the data item falls outside a number of standard deviations from the statistical calculations (Agrawal; C 2, L 38-53, C 3, L 16-20, and C 6, L 38-42; EN: The examiner takes the position that the "determining" as claimed by the applicant is anticipated by Agrawal teaching the use of statistics in locating anomalies).

Regarding claim 9:

Agrawal in combination with Yost teaches,

(Original) The method comprising setting the number of standard deviations to a value set by a user (EN: The examiner take the position that because the standard deviation is a value which can be used to determine whether data is an anomaly or not, and because exception criteria can be set by the user, the invention of Agrawal in combination with the invention of Yost anticipates the setting of standard deviation to a value set by the user.).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the anomaly search method of Agrawal with the subscription based broadcast system of Yost for the purpose of facilitating the real time processing of data based on a user profile (Yost; C 8, L 20-33).

Regarding claims 10

Agrawal teaches,

applying at least one first rule to add the incoming data item and adding the incoming data item to a preexisting collection (Agrawal; C 1, L 38-45; Examiner's Note (EN): Having not further defined the claimed "preexisting collection" in the claimed invention, the examiner has found that the applicant's claimed "preexisting collection" reads on the database as taught by Agrawal.) of one or more data items if the incoming data item follows the first rule (Agrawal; C 1, L 38-45; EN: The examiner takes the position that based on the incoming data from the preexisting collection one or more rules are used to determine which data to add to the multidimensional database, and how to arrange said data in the database.);

calculating statistics regarding the data items in the preexisting collection (Agrawal; C 3, L 1-6; EN: Having not further defined the claimed "statistics" in the claimed invention, the examiner has found that the applicant's claimed "statistics" read on the residual difference and surprise value taught as by Agrawal.);

applying one or more second rules to the calculated statistics to identify whether the incoming data item is an anomalous data item that is misclassified (EN: The examiner takes the position that it would have been obvious to one of ordinary skill in the art that an anomalous data item is inherently misclassified.) and has not properly been added to the preexisting collection despite satisfying the at least one first rule (Agrawal; C 2, L 38-43; EN: Having not further defined the claimed "anomalous data item" in the claimed invention, the examiner has found that the applicant's claimed "anomalous data item" read on the data anomalies as taught by Agrawal.);

flagging the incoming data item as an anomalous data item if the data item is identified as an anomalous data item (Agrawal; C 4, L 47-52; EN: Having not further defined the claimed "flagging [of] incoming data" in the claimed invention, the examiner has found that the applicant's claimed "flagging [of] incoming data" reads on the highlighting of exceptions as taught by Agrawal.); and

indicating to at least one user that the preexisting collection contains at least one data item that has been identified as anomalous with regard to other data items in the preexisting collection (Agrawal; C 4, L 58-62; EN: Having not further defined the claimed "indicating to at least one user" in the claimed invention, the examiner has found

that the applicant's claimed "indicating to at least one user" reads on the identifying of

anomalous data using a user interface as taught by Agrawal.).

Agrawal does not teach the retrieving of a user preference profile or the indicating to a

user based on a retrieved user preference profile.

However, Yost does teach,

> The retrieving of a user preference profile and the indicating to a user based on a
>
> retrieved user preference profile (Yost; C 8, L 24-28; EN: The examiner takes the
>
> position that by teaching the delivery of data based on the user's criteria, Yost et al.
>
> anticipates the retrieving of said user profile. This position is supported by the fact that
>
> in order to properly deliver the correct data to the user, the invention of Yost must
>
> retrieve the personalization module at some point),
>
> It would have been obvious to one of ordinary skill in the art at the time of invention to
>
> combine the anomaly search method of Agrawal with the subscription based broadcast
>
> system of Yost for the purpose of facilitating the real time processing of data based on a
>
> user profile (Yost; C 8, L 20-33).

Regarding claims 11

Agrawal teaches

> (Currently Amended) The computer readable media (Agrawal; C 3, L 23-30) comprising
>
> a method for recognizing and flagging a data item used by one or more application
>
> programs as falling within the scope of a rule but anomalous when compared with other
>
> data items falling within the scope of the rule (Agrawal; C 2, L 38-43; EN: The examiner

takes the position that the broad teaching of locating anomalies in the invention of

Agrawal anticipates the applicant's claimed invention.) wherein calculating comprises

calculating a mean data item size and standard deviation for the other data items in the

preexisting collection (Agrawal; C 3, L 16-20; EN: The examiner takes the position that

the calculating of a mean data item size and standard deviation is anticipated in Agrawal

teaching the recursive subtracting of the value of different data items from an average

data item value).

Regarding claims 12

Agrawal teaches

(Currently Amended) The computer readable media (Agrawal; C 3, L 23-30) comprising

a method for recognizing and flagging a data item used by one or more application

programs as falling within the scope of a rule but anomalous when compared with other

data items falling within the scope of the rule (Agrawal; C 2, L 38-43; EN: The examiner

takes the position that the broad teaching of locating anomalies in the invention of

Agrawal anticipates the applicant's claimed invention.) wherein calculating comprises

calculating a mean interval between data items and standard deviation for the other data

items in the preexisting collection (Agrawal; C 9, L 63-67; EN: The examiner takes the

position that Agrawal anticipates the calculating of a mean interval (claim 3) and an

arrival time (claim 4) of data, where said data includes a time dimension. Additionally,

the examiner previously established that Agrawal et al. taught the calculation of standard

deviation and mean value based on the values of the data items).

Regarding claims 13

Agrawal teaches

(Currently Amended) The computer readable media (Agrawal; C 3, L 23-30) comprising

a method for recognizing and flagging a data item used by one or more application

programs as falling within the scope of a rule but anomalous when compared with other

data items falling within the scope of the rule (Agrawal; C 2, L 38-43; EN: The examiner

takes the position that the broad teaching of locating anomalies in the invention of

Agrawal anticipates the applicant's claimed invention.) wherein calculating comprises

calculating a mean data item arrival time and standard deviation for the other data items

in the preexisting collection (Agrawal; C 9, L 63-67; EN: The examiner takes the position

that Agrawal anticipates the calculating of a mean interval (claim 3) and an arrival time

(claim 4) of data, where said data includes a time dimension. Additionally, the examiner

previously established that Agrawal et al. taught the calculation of standard deviation and

mean value based on the values of the data items).

Regarding claims 14

Agrawal teaches

calculating a presence of absence of keywords for other data items in the preexisting

collection; and identifying whether the data item is an anomalous data item based on the

presence or absence of keywords (Agrawal; C 2, L 43-53; EN: The examiner takes the

position that the calculating of the presence or absence of keywords and identifying

whether an anomalous data item is present based on said keywords is anticipated by

Agrawal teaching the use of keyword such as "Self-Exp", "In-Exp", and "Path-Exp"

which are keywords that have an associated calculated value).

Regarding claims 15

Agrawal teaches

(Currently Amended) The computer readable media (Agrawal; C 3, L 23-30) comprising

a method for recognizing and flagging a data item used by one or more application

programs as falling within the scope of a rule but anomalous when compared with other

data items falling within the scope of the rule (Agrawal; C 2, L 38-43; EN: The examiner

takes the position that the broad teaching of locating anomalies in the invention of

Agrawal anticipates the applicant's claimed invention.) wherein calculating statistics for

other data items in the preexisting collection is performed in real time (Agrawal; C 1, L

22-25; EN: The examiner takes the position that is it widely known in the art that OLAP

methods operate in real-time.).

Regarding claims 16

Agrawal teaches

(Original) The computer readable media (Agrawal; C 3, L 23-30) comprising a method

for recognizing and flagging a data item used by one or more application programs as

falling within the scope of a rule but anomalous when compared with other data items

falling within the scope of the rule (Agrawal; C 2, L 38-43; EN: The examiner takes the

position that the broad teaching of locating anomalies in the invention of Agrawal

anticipates the applicant's claimed invention.) wherein calculating statistics for other data

items in the collection is performed periodically (Agrawal; C 24-28).

Regarding claims 17

Agrawal teaches

(Original) The computer readable media (Agrawal; C 3, L 23-30) comprising a method

for recognizing and flagging a data item used by one or more application programs as

falling within the scope of a rule but anomalous when compared with other data items

falling within the scope of the rule (Agrawal; C 2, L 38-43; EN: The examiner takes the

position that the broad teaching of locating anomalies in the invention of Agrawal

anticipates the applicant's claimed invention.) wherein identifying comprises determining

whether the data item falls outside a number of standard deviations from the statistical

calculations (Agrawal; C 2, L 38-53, C 3, L 16-20, and C 6, L 38-42; EN: The examiner

takes the position that the "determining" as claimed by the applicant is anticipated by

Agrawal teaching the use of statistics in locating anomalies).

Regarding claims 18

Agrawal combination with Yost teaches

(Original) The computer readable media (Agrawal; C 3, L 23-30) comprising a method

for recognizing and flagging a data item used by one or more application programs as

falling within the scope of a rule but anomalous when compared with other data items

falling within the scope of the rule (Agrawal; C 2, L 38-43; EN: The examiner takes the

position that the broad teaching of locating anomalies in the invention of Agrawal

anticipates the applicant's claimed invention.) comprising setting the number of standard

deviations to a value set by a user (EN: The examiner take the position that because the

standard deviation is a value which can be used to determine whether data is an anomaly

or not, and because exception criteria can be set by the user, the invention of Agrawal in

combination with the invention of Yost anticipates the setting of standard deviation to a

value set by the user.).

It would have been obvious to one of ordinary skill in the art at the time of invention to

combine the anomaly search method of Agrawal with the subscription based broadcast

system of Yost for the purpose of facilitating the real time processing of data based on a

user profile (Yost; C 8, L 20-33).

Response to Arguments

Applicant's arguments filed on September 21, 2007 have been fully considered but are found to

be non-persuasive. The unpersuasive arguments made by the Applicant are stated below:

In reference to Applicant's argument:

> Thus, Agrawal fails to teach or suggest the element of "adding the incoming data item to a
> preexisting collection of one or more data items if the incoming data item follows the first rule."

Examiner's response:

The examiner has considered the applicant's argument and has found that having not

further defined the applicant's claimed "preexisting collection", in the claimed invention, the

examiner has found that the applicant's claimed "preexisting collection" reads on the database as

taught by Agrawal.

The rejection of claims 1-19 stands.

In reference to Applicant's argument:

> Thus, Agrawal is silent with regards to identifying incoming data items is an anomalous data item
> that is misclassified and has not properly been added to the preexisting collection.

Examiner's response:

The examiner has considered the applicant's argument and the examiner takes the

position that it would have been obvious to one of ordinary skill in the art that an anomalous data

item is inherently misclassified.

The rejection of claims 1-19 stands.

Conclusion

Claims 1-19 are rejected.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Adrian L. Kennedy whose telephone number is (571) 270-1505. The

examiner can normally be reached on Mon -Fri 8:30am-5pm. If attempts to reach the examiner

by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on

(571) 272-3080. The fax phone number for the organization where this application or

proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALK   David Vincent
                                                                 Supervisory Patent Examiner
                                                                 Technology Center 2100

JOSEPH P HIRL
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100